

=> d his ful

(FILE 'HOME' ENTERED AT 14:15:36 ON 22 JUL 2005)

FILE 'REGISTRY' ENTERED AT 14:15:41 ON 22 JUL 2005

L1 STR
L2 0 SEA SSS SAM L1
L3 SCR 2043
L4 0 SEA SSS SAM L3 AND L1
L5 0 SEA SSS FUL L3 AND L1
D QUE
L6 1 SEA ABB=ON PLU=ON 544706-97-0
D SCA
L7 STR
L8 0 SEA SSS SAM L7
L9 0 SEA SUB=L6 SSS SAM L7
L10 STR L7
L11 0 SEA SUB=L6 SSS SAM L10
L12 1 SEA SSS SAM L3 AND L10
D SCA
L13 105 SEA SSS FUL L3 AND L10
L14 0 SEA ABB=ON PLU=ON L6 AND L13
L15 STR L1
L16 0 SEA SSS SAM L3 AND L15
L17 7 SEA SSS FUL L3 AND L15
L18 1 SEA ABB=ON PLU=ON L17 AND L6
D SCA L17
L19 STR
L20 3 SEA SUB=L17 SSS FUL L19
D SCA

FILE 'HCAPLUS' ENTERED AT 15:05:00 ON 22 JUL 2005

L21 4 SEA ABB=ON PLU=ON L20

FILE 'STNGUIDE' ENTERED AT 15:05:29 ON 22 JUL 2005

FILE 'REGISTRY' ENTERED AT 15:08:06 ON 22 JUL 2005

L22 STR
L23 0 SEA SSS SAM L22
L24 0 SEA SSS SAM L3 AND L22
L25 3 SEA SSS FUL L3 AND L22
D SCA

FILE 'HCAPLUS' ENTERED AT 15:09:40 ON 22 JUL 2005

L26 5 SEA ABB=ON PLU=ON L25

FILE 'REGISTRY' ENTERED AT 15:11:02 ON 22 JUL 2005

L27 STR L22
L28 13 SEA SSS FUL L3 AND L27

FILE 'HCAPLUS' ENTERED AT 15:11:33 ON 22 JUL 2005

L29 21 SEA ABB=ON PLU=ON L28

FILE 'REGISTRY' ENTERED AT 15:11:48 ON 22 JUL 2005

L30 STR
L31 0 SEA SSS FUL L3 AND L30
D QUE
L32 STR L30

L33 0 SEA SSS SAM L32
 L34 0 SEA SSS SAM L3 AND L32
 L35 49 SEA SSS FUL L3 AND L32
 L36 STR L32
 L37 3 SEA SSS SAM L3 AND L36
 L38 279 SEA SSS FUL L3 AND L36
 L39 160 SEA ABB=ON PLU=ON L38 AND NC<4
 L40 1 SEA ABB=ON PLU=ON OXIRANE/CN
 E POLYETHYLENE GLYCOL/CN
 L41 1 SEA ABB=ON PLU=ON "POLYETHYLENE GLYCOL"/CN
 L*** DEL 3337 S POLYPROPYLENE GLYCOL
 L42 1 SEA ABB=ON PLU=ON POLYPROPYLENE GLYCOL/CN
 L43 3 SEA ABB=ON PLU=ON (L40 OR L41 OR L42)
 SEL RN
 L44 44461 SEA ABB=ON PLU=ON (25322-68-3/CRN OR 25322-69-4/CRN OR
 75-21-8/CRN)
 L45 58 SEA ABB=ON PLU=ON L44 AND L38
 L46 24 SEA ABB=ON PLU=ON L39 AND L44
 L47 274 SEA ABB=ON PLU=ON L38 NOT IDS/CI
 L48 67 SEA ABB=ON PLU=ON L47 AND NC<3
 L49 1 SEA ABB=ON PLU=ON L48 AND L44
 D SCA

FILE 'HCAPLUS' ENTERED AT 16:03:39 ON 22 JUL 2005
 L50 1 SEA ABB=ON PLU=ON L49
 D SCA TI

FILE 'REGISTRY' ENTERED AT 16:03:58 ON 22 JUL 2005
 L51 7 SEA ABB=ON PLU=ON L47 AND NC=1
 D SCA
 L52 2 SEA ABB=ON PLU=ON L51 AND "POLY(OXY-")?/CN
 D SCA
 L53 3 SEA ABB=ON PLU=ON L49 OR L52

FILE 'HCAPLUS' ENTERED AT 16:05:42 ON 22 JUL 2005

FILE 'REGISTRY' ENTERED AT 16:08:15 ON 22 JUL 2005
 L54 STR
 L55 1 SEA SSS SAM L54
 L56 8 SEA SSS SAM L3 AND L54
 L57 703 SEA SSS FUL L3 AND L54
 L58 13 SEA ABB=ON PLU=ON L57 AND L44
 L59 2 SEA ABB=ON PLU=ON L58 AND NC=2
 D SCA
 L60 668 SEA ABB=ON PLU=ON L57 NOT IDS/CI
 L61 310 SEA ABB=ON PLU=ON L60 AND NC=1

FILE 'HCAPLUS' ENTERED AT 16:15:17 ON 22 JUL 2005
 L62 2 SEA ABB=ON PLU=ON (L59 OR L61) (L) PROTEIN
 D SCA TI
 D L19

FILE 'REGISTRY' ENTERED AT 16:20:13 ON 22 JUL 2005

FILE 'HCAPLUS' ENTERED AT 16:20:17 ON 22 JUL 2005
 D L27
 D QUE L31

FILE 'REGISTRY' ENTERED AT 16:22:29 ON 22 JUL 2005

L63 STR L30
L64 0 SEA SSS FUL L3 AND L63
D QUE L31
D SCA L53
L65 STR L1
L66 11 SEA SSS FUL L3 AND L65
L67 0 SEA ABB=ON PLU=ON L66 AND L44
L68 20 SEA ABB=ON PLU=ON L17 OR L25 OR L28 OR L31 OR L53

FILE 'HCAPLUS' ENTERED AT 16:28:02 ON 22 JUL 2005

L69 25 SEA ABB=ON PLU=ON L68
L70 2 SEA ABB=ON PLU=ON (L59 OR L62) (L) PROTEIN
L71 [REDACTED] 27 SEA ABB=ON PLU=ON L69 OR L70

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUL 2005 HIGHEST RN 856430-35-8
DICTIONARY FILE UPDATES: 21 JUL 2005 HIGHEST RN 856430-35-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE HCAPLUS

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FILE COVERS 1907 - 22 Jul 2005 VOL 143 ISS 5
 FILE LAST UPDATED: 21 Jul 2005 (20050721/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE STNGUIDE
 FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Jul 15, 2005 (20050715/UP).

=> d que
 L3 SCR 2043
 L15 STR
 C=O NH^C=O O~~C=O
 @16 17 @18 @19 20 @21 @22 23

AK~O~G3~G4~G5~G6~CH=O
 3 4 5 6 7 8 9 10

REP G3=(2-4) CH2
 VAR G4=16/18-5 19-7/21-5 22-7
 VAR G5=O/NH
 REP G6=(2-8) CH2
 NODE ATTRIBUTES:
 CONNECT IS E2 RC AT 3
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE
 L17 7 SEA FILE=REGISTRY SSS FUL L3 AND L15
 L22 STR

8
 O
 |||
 O---CH~G1~NH~C~~CH2~CH2
 1 2 3 4 5 6 7

REP G1=(2-8) CH2
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
 L25 3 SEA FILE=REGISTRY SSS FUL L3 AND L22

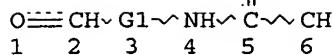
L27

STR

8

O

||



REP G1=(2-8) CH2

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L28 13 SEA FILE=REGISTRY SSS FUL L3 AND L27

L30 STR

10

O

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11

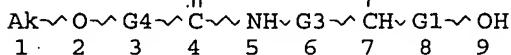
OH

}

CH~G2

@12 13

CH2 @14 Ak @15



VAR G1=12/14

VAR G2=15/PH

REP G3=(2-8) CH2

REP G4=(2-4) CH2

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 1

CONNECT IS E1 RC AT 15

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

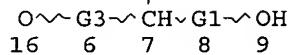
L31 0 SEA FILE=REGISTRY SSS FUL L3 AND L30

L36 STR

11

OH

}



VAR G1=12/14

VAR G2=15/PH

REP G3=(2-8) CH2

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 15

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L38 279 SEA FILE=REGISTRY SSS FUL L3 AND L36
L44 44461 SEA FILE=REGISTRY ABB=ON PLU=ON (25322-68-3/CRN OR 25322-69-4
/CRN OR 75-21-8/CRN)
L47 274 SEA FILE=REGISTRY ABB=ON PLU=ON L38 NOT IDS/CI
L48 67 SEA FILE=REGISTRY ABB=ON PLU=ON L47 AND NC<3
L49 1 SEA FILE=REGISTRY ABB=ON PLU=ON L48 AND L44
L51 7 SEA FILE=REGISTRY ABB=ON PLU=ON L47 AND NC=1
L52 2 SEA FILE=REGISTRY ABB=ON PLU=ON L51 AND "POLY(OXY-")?/CN
L53 3 SEA FILE=REGISTRY ABB=ON PLU=ON L49 OR L52
L54 STR

O~~G4~~G3~~G2~~G1~~CH2-NH . C=O NH~~C=O O~~C=O
7 6 1 2 3 4 5 @8 9 @10 @11 12 @13 @14 15

REP G1=(2-8) CH2

VAR G2=O/NH

VAR G3=8/10-6 11-2/13-6 14-2

REP G4=(2-4) CH2

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L57 703 SEA FILE=REGISTRY SSS FUL L3 AND L54
L58 13 SEA FILE=REGISTRY ABB=ON PLU=ON L57 AND L44
L59 2 SEA FILE=REGISTRY ABB=ON PLU=ON L58 AND NC=2
L60 668 SEA FILE=REGISTRY ABB=ON PLU=ON L57 NOT IDS/CI
L61 310 SEA FILE=REGISTRY ABB=ON PLU=ON L60 AND NC=1
L62 2 SEA FILE=HCAPLUS ABB=ON PLU=ON (L59 OR L61) (L) PROTEIN
L68 20 SEA FILE=REGISTRY ABB=ON PLU=ON L17 OR L25 OR L28 OR L31 OR
L53
L69 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L68
L70 2 SEA FILE=HCAPLUS ABB=ON PLU=ON (L59 OR L62) (L) PROTEIN
L71 27 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 OR L70

=> d 171 ibib abs hitind hitstr 1-27

L71 ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:1060830 HCAPLUS
DOCUMENT NUMBER: 142:38753
TITLE: Water-soluble polymers containing protected vicinal
diols
INVENTOR(S): Fox, Martin Edward; Appell, Robert Bruce
PATENT ASSIGNEE(S): UK
SOURCE: U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004249119	A1	20041209	US 2003-455524	20030605
US 2004249067	A1	20041209	US 2004-859385	20040602
WO 2005000941	A1	20050106	WO 2004-US17140	20040602
WO 2005000941	C1	20050310		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2003-455524 A2 20030605

AB The invention comprises a linear or branched polymer derivative comprising a water soluble and non-peptidic polymer backbone that incorporates an optionally protected vicinal diol, which is either embedded in the polymer backbone or is attached as a pendant group, wherein each linking group (linker) between the polymer backbone and the vicinal diol is a chain comprising at least two saturated carbon atoms. The invention further comprises a method of using the polymer derivative to form an aldehyde and either a second aldehyde or a ketone by way of oxidative cleavage.

IC ICM C08G065-32

INCL 528480000; 525061000; 525326100; 525403000

CC 35-8 (Chemistry of Synthetic High Polymers)

IT 161927-25-9P 804564-43-0P 804564-44-1P 804564-46-3P

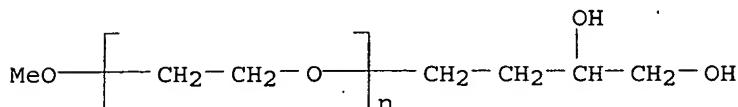
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(water-soluble polymers containing protected vicinal diols)

IT 804564-46-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(water-soluble polymers containing protected vicinal diols)

RN 804564-46-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -(3,4-dihydroxybutyl)- ω -methoxy-
(9CI) (CA INDEX NAME)



L71 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:1060811 HCAPLUS
 DOCUMENT NUMBER: 142:38751
 TITLE: Linear or branched methoxypolyethylene glycol polymer derivatives for forming aldehydes or ketones and their preparation
 INVENTOR(S): Fox, Martin Edward; Appell, Robert Bruce; Cantrill, Alexander Allan

PATENT ASSIGNEE(S) : UK
 SOURCE: U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S.
 Ser. No. 455,524.
 CODEN: USXXCO

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004249067	A1	20041209	US 2004-859385	20040602
US 2004249119	A1	20041209	US 2003-455524	20030605

PRIORITY APPLN. INFO.: US 2003-455524 A2 20030605

AB The polymer derivative comprises a water soluble and non-peptidic polymer backbone incorporating an optionally protected vicinal diol, which is either embedded in the polymer backbone or is attached as a pendant group, wherein each linking group (linker) between the polymer backbone and the vicinal diol is a chain comprising ≥ 2 adjacent saturated carbon atoms. Polymer derivative is used for forming an aldehyde and either a second aldehyde or a ketone by way of oxidative cleavage.

IC ICM C08G083-00

INCL 525056000; 525326100; 525326700; 525326800; 525383000; 525403000

CC 35-8 (Chemistry of Synthetic High Polymers)

IT 804564-43-0P 804564-44-1P 804564-45-2P 804564-46-3P

804564-47-4P 804564-48-5P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of linear or branched methoxypolyethylene glycol polymer derivs. for forming aldehydes or ketones)

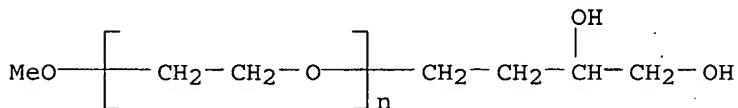
IT 804564-46-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation of linear or branched methoxypolyethylene glycol polymer derivs. for forming aldehydes or ketones)

RN 804564-46-3 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -(3,4-dihydroxybutyl)- ω -methoxy-
(9CI) (CA INDEX NAME)



L71 ANSWER 3 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:609952 HCPLUS

DOCUMENT NUMBER: 141:157893

TITLE: Novel monofunctional polyethylene glycol aldehydes useful for pegylation

INVENTOR(S): Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S.
Ser. No. 661,268.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004147687	A1	20040729	US 2003-715607	20031118
KR 2003048293	A	20030619	KR 2001-78244	20011211
US 2003153694	A1	20030814	US 2002-303260	20021125
US 2004034188	A1	20040219	US 2003-431294	20030507
US 6916962	B2	20050712		
US 2004122164	A1	20040624	US 2003-661268	20030912
PRIORITY APPLN. INFO.:				
			KR 2001-78244	A 20011211
			US 2002-348452P	P 20020116
			US 2002-381503P	P 20020517
			US 2002-407741P	P 20020903
			US 2002-303260	A2 20021125
			US 2003-431294	A2 20030507
			US 2003-661268	A2 20030912

AB The present invention provides novel monofunctional polyethylene glycol aldehydes for the pegylation of therapeutically active proteins. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived. New syntheses for preparing such aldehydes are described.

IC ICM C08G065-32

INCL 525389000; 525403000

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 63

IT 79-10-7DP, Acrylic acid, addition products with methoxypolyethylene glycol, ester with hydroxysuccinimide, amide derivative, urethane propionaldehyde 6066-82-6DP, N-Hydroxysuccinimide, ester with methoxypolyethylene glycol acrylic acid addition product, amide derivative, urethane propionaldehyde 9004-74-4DP, Methoxypolyethylene glycol, addition products with acrylic acid, ester with hydroxysuccinimide, amide derivative, urethane propionaldehyde 41365-75-7DP, displacement reaction products with hydroxysuccinimide esterified methoxypolyethylene glycol acrylic acid addition product, deacetalized compound 533881-58-2P 544706-95-8P
 544706-97-0P 544706-99-2P 544707-02-0P
 544707-05-3P 544708-06-7P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

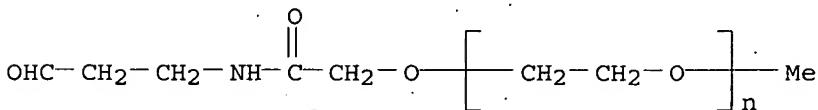
IT 544706-95-8P 544706-97-0P 544707-02-0P

544707-05-3P

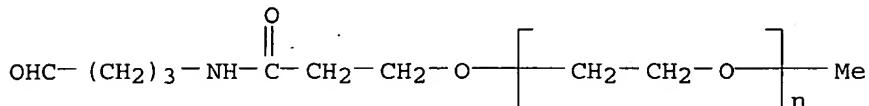
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

RN 544706-95-8 HCAPLUS

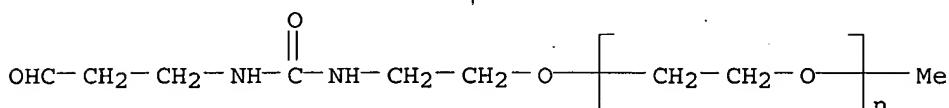
CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)



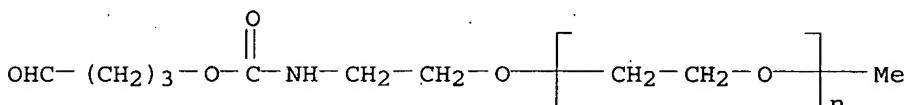
RN 544706-97-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)

RN 544707-02-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

RN 544707-05-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[(4-oxobutoxy)carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

L71 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:513373 HCAPLUS

DOCUMENT NUMBER: 141:72062

TITLE: monofunctional polyethylene glycol aldehydes,
preparation and protein conjugate

INVENTOR(S): Rosen, Perry; Nho, Kwang H.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S.
Pat. Appl. 2004 34,188.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004122164	A1	20040624	US 2003-661268	20030912
KR 2003048293	A	20030619	KR 2001-78244	20011211
US 2003153694	A1	20030814	US 2002-303260	20021125
US 2004034188	A1	20040219	US 2003-431294	20030507
US 6916962	B2	20050712		
US 2004147687	A1	20040729	US 2003-715607	20031118
PRIORITY APPLN. INFO.:			KR 2001-78244	A 20011211
			US 2002-303260	A2 20021125

US 2003-431294	A2 20030507
US 2002-348452P	P 20020116
US 2002-381503P	P 20020517
US 2002-407741P	P 20020903
US 2003-661268	A2 20030912

AB The monofunctional polyethylene glycol aldehydes are used for the pegylation of therapeutically active proteins. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived.

IC ICM C08G065-00

ICS C08G063-48; C08G063-91

INCL 525054100; 528230000; 525526000

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 63

IT 112344-11-3DP, Acrylic acid-ethylene oxide graft copolymer, reaction products with hydroxysuccinimide, aminodiethoxypropane, and aldehyde formation 533881-58-2P 544706-95-8P 544706-97-0P

544706-99-2P 544707-02-0P 544707-05-3P 544708-06-7P

RL: IMF (Industrial manufacture); PREP (Preparation)

(polyethylene glycol aldehydes for conjugates with proteins)

IT 544706-95-8P 544706-97-0P 544707-02-0P

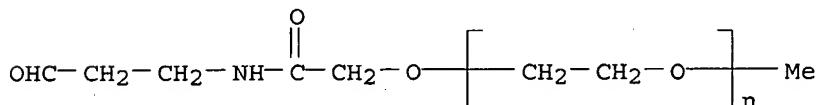
544707-05-3P

RL: IMF (Industrial manufacture); PREP (Preparation)

(polyethylene glycol aldehydes for conjugates with proteins)

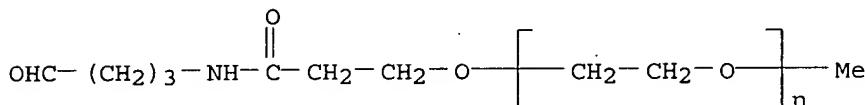
RN 544706-95-8 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)



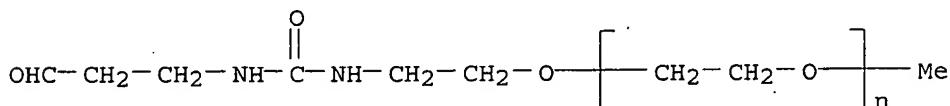
RN 544706-97-0 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)



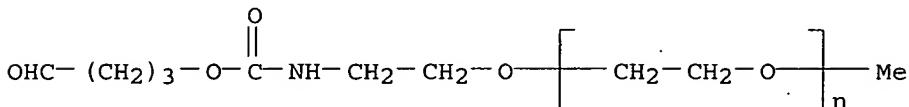
RN 544707-02-0 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)



RN 544707-05-3 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[(4-oxobutoxy)carbonyl]amino]ethoxy] - (9CI) (CA INDEX NAME)



L71 ANSWER 5 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:493467 HCPLUS

DOCUMENT NUMBER: 141:59665

TITLE: Bifunctional polyethylene glycol derivatives

INVENTOR(S): Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 52 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004115165	A1	20040617	US 2003-721013	20031121
PRIORITY APPLN. INFO.:			US 2002-428809P	P 20021125

AB The present invention provides novel heterobifunctional and monobifunctional polyethylene glycol derivs. for the pegylation of therapeutically active proteins. The heterobifunctional PEGs which bear two different functional groups as well as the monobifunctional PEGs which contain two similar functional groups, may be used for crosslinking purposes. The crosslinking may be intramol. between two areas within the same mol. or intermol. between two sep. mols. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived. New syntheses for preparing such bifunctional derivs. are described.

IC ICM A61K031-765

ICS C08G059-14

INCL 424078380; 525523000

CC 63-5 (Pharmaceuticals)

IT 650634-84-7P 705933-20-6P 705933-21-7P 705933-22-8P

705933-23-9P 705933-24-0P 705933-25-1P 705933-26-2P

705933-27-3P 705933-28-4P

RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(bifunctional polyethylene glycol derivs.)

IT 650634-84-7P 705933-20-6P 705933-23-9P

705933-26-2P 705933-27-3P

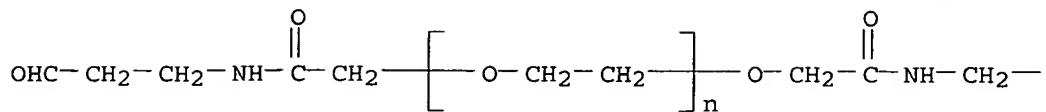
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(bifunctional polyethylene glycol derivs.)

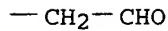
RN 650634-84-7 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-oxo-2-[(3-oxopropyl)amino]ethyl]- ω -[2-oxo-2-[(3-oxopropyl)amino]ethoxy] - (9CI) (CA INDEX NAME)

PAGE 1-A



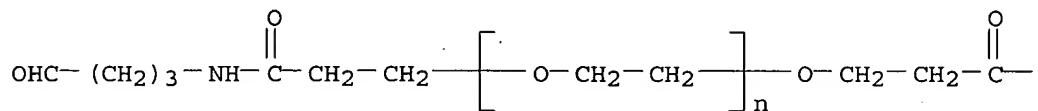
PAGE 1-B



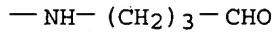
RN 705933-20-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-oxo-3-[(4-oxobutyl)amino]propyl]- ω -[3-oxo-3-[(4-oxobutyl)amino]propoxy] - (9CI) (CA INDEX NAME)

PAGE 1-A



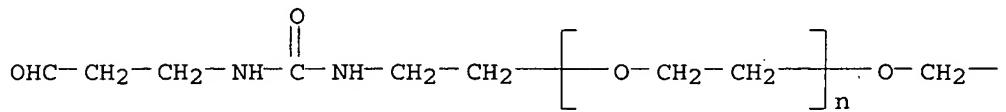
PAGE 1-B



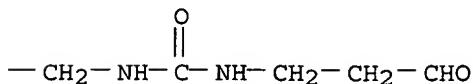
RN 705933-23-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethyl]- ω -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethoxy] - (9CI) (CA INDEX NAME)

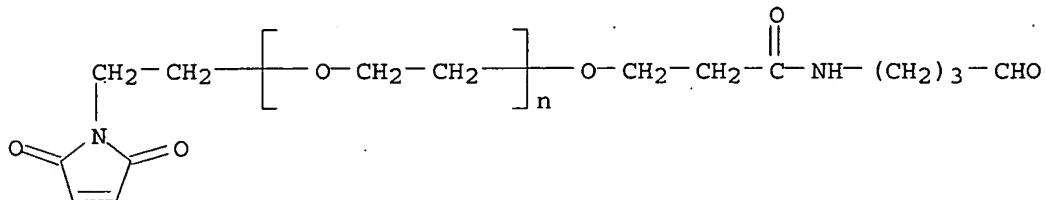
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PAGE 1-B



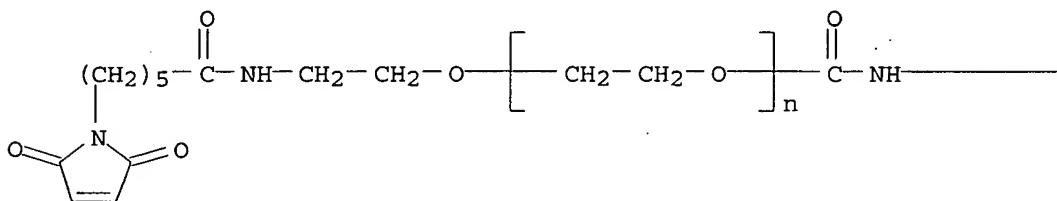
RN 705933-26-2 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)ethyl]- ω -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)

RN 705933-27-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[[(4-oxobutyl)amino]carbonyl]- ω -[2-[[6-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxohexyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— (CH2)3-CHO

L71 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:142840 HCAPLUS

DOCUMENT NUMBER: 140:181998

TITLE: Novel monofunctional polyethylene glycol aldehydes

INVENTOR(S): Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S): Sun Bio, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 16 pp., Cont.-in-part of U.S. Ser. No. 303,260.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2004034188	A1	20040219	US 2003-431294	20030507
US 6916962	B2	20050712		

KR 2003048293	A	20030619	KR 2001-78244	20011211
US 2003153694	A1	20030814	US 2002-303260	20021125
US 2004122164	A1	20040624	US 2003-661268	20030912
US 2004147687	A1	20040729	US 2003-715607	20031118
PRIORITY APPLN. INFO.:				
			KR 2001-78244	A 20011211
			US 2002-348452P	P 20020116
			US 2002-381503P	P 20020517
			US 2002-407741P	P 20020903
			US 2002-303260	A2 20021125
			US 2003-431294	A2 20030507
			US 2003-661268	A2 20030912

AB The present invention provides novel monofunctional polyethylene glycol aldehydes for the pegylation of therapeutically active proteins. The pegylated protein conjugates that are produced, retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived. New syntheses for preparing such aldehydes are described.

IC ICM C08G065-00

INCL 528230000; 528250000

CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 63

IT 544706-95-8P

RL: IMF (Industrial manufacture); PREP (Preparation)
(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

IT 314065-74-2DP, Acrylic acid-ethylene oxide graft copolymer methyl ether, ester with N-hydroxysuccinimide, displacement reaction products with 1-amino-4,4-dimethoxybutane, deacetalized compds. 533881-58-2P

544706-97-0P 544706-99-2P 544707-02-0P

544707-05-3P 544708-06-7P

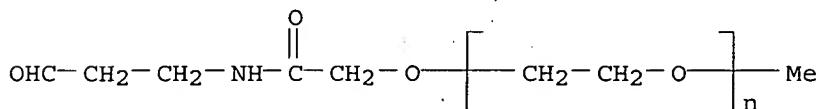
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

IT 544706-95-8P

RL: IMF (Industrial manufacture); PREP (Preparation)
(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

RN 544706-95-8 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

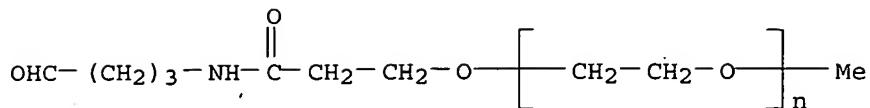


IT 544706-97-0P 544707-02-0P 544707-05-3P

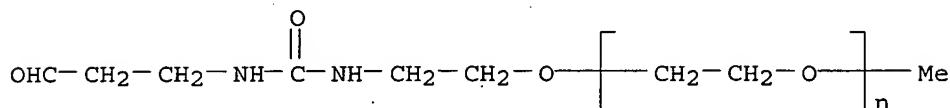
RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(novel monofunctional polyethylene glycol aldehydes for pegylation of therapeutically active proteins)

RN 544706-97-0 HCPLUS

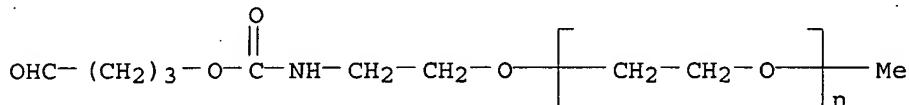
CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)



RN 544707-02-0 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[[(3-oxopropyl)amino]carbonyl]amino]ethoxy] - (9CI) (CA INDEX NAME)



RN 544707-05-3 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[[(4-oxobutoxy)carbonyl]amino]ethoxy] - (9CI) (CA INDEX NAME)



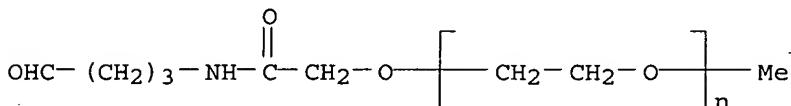
L71 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:120875 HCAPLUS
 DOCUMENT NUMBER: 140:187355
 TITLE: Preparation of PEGylated T1249 polypeptide conjugates as antiviral agents
 INVENTOR(S): Bailon, Pascal Sebastian; Won, Chee-Youb
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.
 SOURCE: PCT Int. Appl., 61 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004013165	A1	20040212	WO 2003-EP7711	20030716
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2492954	AA	20040212	CA 2003-2492954	20030716
EP 1546193	A1	20050629	EP 2003-766191	20030716
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			

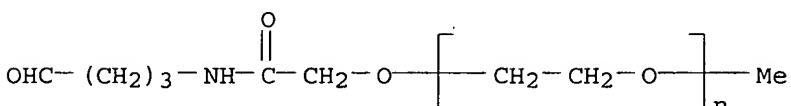
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2004171542 A1 20040902 US 2003-625103 20030722
 PRIORITY APPLN. INFO.: US 2002-398190P P 20020724
 US 2003-439213P P 20030110
 WO 2003-EP7711 W 20030716

AB Pegylated T1249 polypeptide compds. are provided. Also provided are pharmaceutical compns. containing pegylated T1249 polypeptide compds., and processes of making. Further provided is the use of pharmaceutical composition comprising, in admixt. with a pharmaceutically acceptable excipient, a PEGylated T1249 polypeptide conjugate, for the preparation of a medicament for the inhibition of HIV infection. Propionaldehyde-PEG was reacted with T1249 to obtain propionaldehyde-PEG-T1249 conjugate. Antiviral efficacy of the conjugate was shown in rats.

IC ICM C07K014-16
 ICS A61K038-16; A61P031-18
 CC 63-5 (Pharmaceuticals)
 Section cross-reference(s): 1
 IT 125061-88-3DP, reaction with T1249 251562-00-2DP, T1249, conjugates with polyethylene glycol derivs. 650634-82-5DP, reaction with T1249 650634-82-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of PEGylated T1249 polypeptide conjugates as antiviral agents)
 IT 650634-82-5DP, reaction with T1249 650634-82-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of PEGylated T1249 polypeptide conjugates as antiviral agents)
 RN 650634-82-5 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)



RN 650634-82-5 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)



L71 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:120874 HCAPLUS
 DOCUMENT NUMBER: 140:187354
 TITLE: Preparation of PEGylated T20 polypeptide conjugates as antiviral agents
 INVENTOR(S): Bailon, Pascal Sebastian; Won, Chee-Youb
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.

SOURCE: PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004013164	A1	20040212	WO 2003-EP7710	20030716
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2493534	AA	20040212	CA 2003-2493534	20030716
EP 1527088	A1	20050504	EP 2003-766190	20030716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004049018	A1	20040311	US 2003-623873	20030721
PRIORITY APPLN. INFO.:			US 2002-398195P	P 20020724
			WO 2003-EP7710	W 20030716

AB Pegylated T20 polypeptide compds. are provided. Also provided are pharmaceutical compns. containing pegylated T20 polypeptide compds., and processes of making and using such compds. and compns. Propionaldehyde-PEG was reacted with T20 to obtain propionaldehyde-PEG-T20 conjugate (I). The IC₅₀ of I was 0.261 µg/mL.

IC ICM C07K014-16

ICS A61K038-16; A61P031-18

CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1

IT 125061-88-3DP, reaction with T20 peptide 159519-65-0DP, T20, conjugates with polyethylene glycol derivs. 650634-82-5DP, reaction with T20 peptide 650634-82-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of PEGylated T20 polypeptide conjugates as antiviral agents)

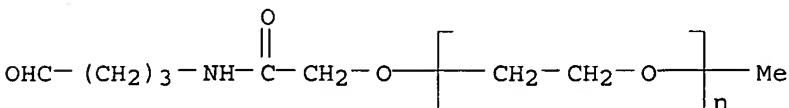
IT 650634-82-5DP, reaction with T20 peptide 650634-82-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

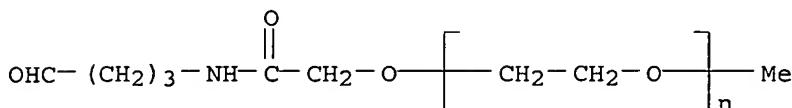
(preparation of PEGylated T20 polypeptide conjugates as antiviral agents)

RN 650634-82-5 HCPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)



RN 650634-82-5 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)



L71 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:80370 HCAPLUS
 DOCUMENT NUMBER: 140:128840
 TITLE: Aldehyde derivatives of polyethylene glycol
 INVENTOR(S): Won, Chee-youb
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 18 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004019157	A1	20040129	US 2003-623978	20030721
CA 2493221	AA	20040212	CA 2003-2493221	20030716
WO 2004013205	A1	20040212	WO 2003-EP7734	20030716
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1539857	A1	20050615	EP 2003-766194	20030716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			US 2002-398196P	P 20020724
			WO 2003-EP7734	W 20030716
AB Polyethylene glycol aldehyde compds. of $R(\text{CH}_2\text{CH}_2\text{O})_n\text{CH}_2\text{CH}_2\text{XYNH}(\text{CH}_2)\text{pCHO}$ (wherein R = capping groups; X = O, NH; Y = alkylene carbonyl, carbonyl, hydroxyalkylene, amido group; n = 10-10,000; and p = 1-3) or the like are provided. Methods of making and using such compds., as well as chemical intermediates are also provided, which may be used in connection with the pegylation of polypeptides and other biomols. (no data).				
IC ICM C08G065-00				
INCL 525403000; 528405000				
CC 35-8 (Chemistry of Synthetic High Polymers)				
Section cross-reference(s): 34				
IT 650634-80-3P 650634-82-5P 650634-83-6P				
650634-84-7P				
RL: IMF (Industrial manufacture); PREP (Preparation) (manufacture of aldehyde derivs. of polyethylene glycol)				

IT 650634-80-3P 650634-82-5P 650634-83-6P

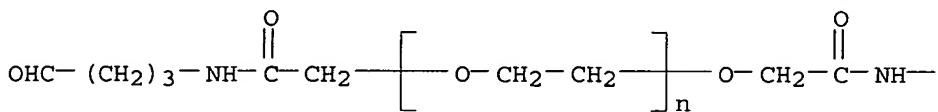
650634-84-7P

RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of aldehyde derivs. of polyethylene glycol)

RN 650634-80-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-oxo-2-[(4-oxobutyl)amino]ethyl]-
 ω -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

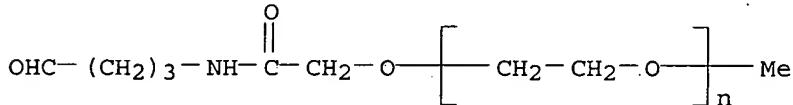
PAGE 1-A



PAGE 1-B

— (CH₂)₃—CHO

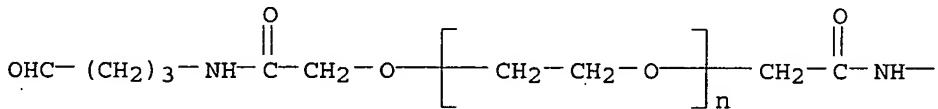
RN 650634-82-5 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

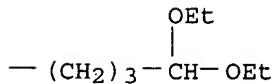
RN 650634-83-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-[(4,4-diethoxybutyl)amino]-2-oxoethyl]- ω -[2-oxo-2-[(4-oxobutyl)amino]ethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



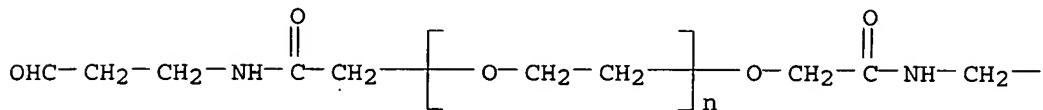
PAGE 1-B



RN 650634-84-7 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-oxo-2-[(3-oxopropyl)amino]ethyl]-
 ω -[2-oxo-2-[(3-oxopropyl)amino]ethoxy] - (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— CH₂— CHO

L71 ANSWER 10 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:472355 HCPLUS

DOCUMENT NUMBER: 139:53490

TITLE: Monofunctional polyethylene glycol aldehydes with various spacers, their preparation and protein conjugates

INVENTOR(S): Rosen, Perry; Nho, Kwang

PATENT ASSIGNEE(S): Sun Bio, Inc., USA

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003049699	A2	20030619	WO 2002-US39434	20021209
WO 2003049699	A3	20041229		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2003048293	A	20030619	KR 2001-78244	20011211
EP 1507755	A2	20050223	EP 2002-792347	20021209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRIORITY APPLN. INFO.:				
		KR 2001-78244	A	20011211
		US 2002-348452P	P	20020116
		US 2002-381503P	P	20020517
		US 2002-407741P	P	20020903
		WO 2002-US39434	W	20021209

AB Novel monofunctional polyethylene glycol aldehydes are for pegylating therapeutically active proteins to produce pegylated protein conjugates which retain a substantial portion of their therapeutic activity and are less immunogenic than the protein from which the conjugate is derived.

IC ICM A61K

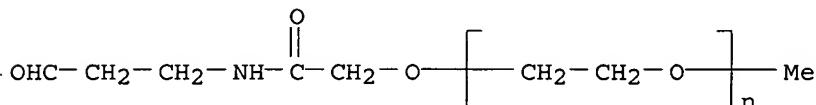
CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 63

IT 112344-11-3DP, Acrylic acid-ethylene oxide graft copolymer, reaction products with hydroxysuccinimide, aminodioethoxypropane, and aldehyde formation 533881-58-2P 544706-95-8P 544706-97-0P
544706-99-2P 544707-02-0P 544707-05-3P 544708-06-7P
RL: IMF (Industrial manufacture); PREP (Preparation)
(polyethylene glycol aldehydes with various spacers for conjugates with therapeutically active proteins)

IT 544706-95-8P 544706-97-0P 544707-02-0P
544707-05-3P
RL: IMF (Industrial manufacture); PREP (Preparation)
(polyethylene glycol aldehydes with various spacers for conjugates with therapeutically active proteins)

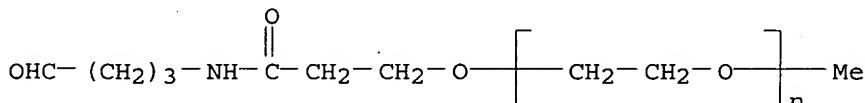
RN 544706-95-8 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-oxo-2-[(3-oxopropyl)amino]ethoxy]- (9CI) (CA INDEX NAME)



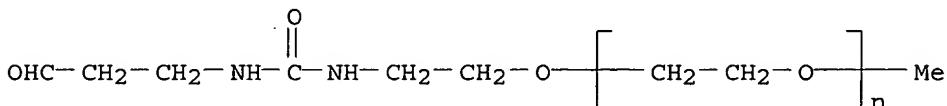
RN 544706-97-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[3-oxo-3-[(4-oxobutyl)amino]propoxy]- (9CI) (CA INDEX NAME)



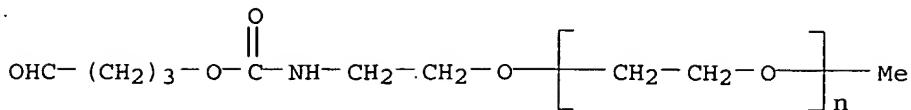
RN 544707-02-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[[[(3-oxopropyl)amino]carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)



RN 544707-05-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[2-[[[(4-oxobutoxy)carbonyl]amino]ethoxy]- (9CI) (CA INDEX NAME)



L71 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:888697 HCAPLUS
 DOCUMENT NUMBER: 137:389143
 TITLE: Complexes for transferring therapeutic proteins and nucleic acids into an animal cell
 INVENTOR(S): Braun, Serge; Meyer, Olivier; Nazih, Abdesslame; Heissler, Denis
 PATENT ASSIGNEE(S): Transgene S.A., Fr.
 SOURCE: PCT Int. Appl., 58 pp.
 CODEN: PIIXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092554	A1	20021121	WO 2002-EP5304	20020514
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2447548	AA	20021121	CA 2002-2447548	20020514
EP 1389182	A1	20040218	EP 2002-750924	20020514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004528384	T2	20040916	JP 2002-589440	20020514
PRIORITY APPLN. INFO.:			EP 2001-440134	A 20010515
			US 2001-293188P	P 20010525
			WO 2002-EP5304	W 20020514

OTHER SOURCE(S): MARPAT 137:389143
 AB The present invention concerns new polar compds., complexes and compns. comprising them, wherein the compound comprises: (i) a polar headgroup spacer, (ii) at least 1 hydrophobic moiety, and (iii) at least 1 hydrophilic polymer, and wherein the head-group spacer is coupled to the hydrophobic moiety and to the hydrophilic polymer. A lipid was prepared by the reaction of PEG monomethyl ether with H2N(CH2)3N(BOC)(CH2)3N(BOC)(CH2)3N(BOC)(CH2)3NH2 followed by reaction with an aldehyde containing oleoyl groups. A cationic lipid/DNA complex was obtained by the treatment of the above lipid with DNA.
 IC ICM C07C271-20
 ICS A61K048-00; C12N015-88
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 3, 23
 IT 56-18-8 107-13-1, 2-Propenenitrile, reactions 156-87-6, 1-Amino-3-propanol 598-21-0, Bromoacetyl bromide 9004-74-4,

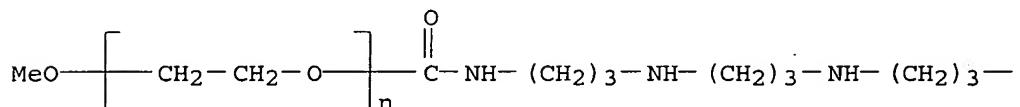
Polyethylene glycol monomethyl ether 24424-99-5, Di-tert-butyl dicarbonate 29655-46-7 61278-21-5 93790-78-4 475576-35-3 475576-36-4 475576-37-5 475576-38-6 475576-39-7 475576-40-0 475576-41-1 475576-42-2 475576-43-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of lipids containing PEG; complexes for transferring therapeutic proteins and nucleic acids into animal cell)

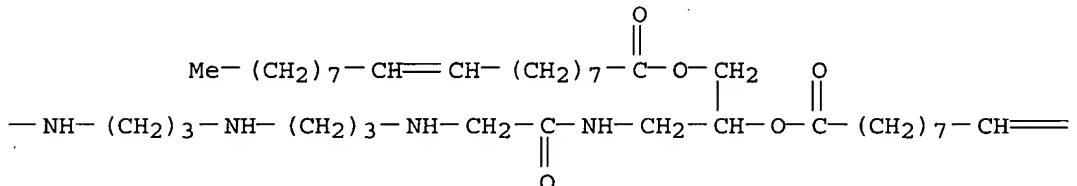
IT 475576-43-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of lipids containing PEG; complexes for transferring therapeutic proteins and nucleic acids into animal cell)

RN 475576-43-3 HCPLUS
CN Poly(oxy-1,2-ethanediyl), α -[(27S,38Z)-1,24,30-trioxo-27-[(9Z)-1-oxo-9-octadecenyl]oxy]-29-oxa-2,6,10,14,18,22,25-heptaazaheptatetracont-38-en-1-yl]- ω -methoxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



PAGE 1-C

$= \text{CH} - (\text{CH}_2)_7 - \text{Me}$

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L71 ANSWER 12 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:496066 HCPLUS

DOCUMENT NUMBER: 121:96066

TITLE: Electrophotographic lithographic plate

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 80 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05216294	A2	19930827	JP 1992-47658	19920204
PRIORITY APPLN. INFO.:			JP 1992-47658	19920204

AB In the title lithog. platemaking using an electrophotog. plate possessing ≥ 1 photoconductor layers and a claimed surface layer, the latter contains dispersion resin particles (L), the binder resin for the photoconductive layer contains ≥ 1 claimed binder resins (A), the latent image produced on the electrophotog. plate is developed with a toner, and the photoconductive layer in the non-image-bearing regions is desensitized with a solution containing a hydrophilic compound (Pearson's nucleophilic constant ≥ 5). L is obtained by dispersion polymerizing, in a nonaq. solvent, a monofunctional monomer containing ≥ 1 functional groups selected from a formyl group and a group expressed by CH(OA1)(OA2) [A1,A2 = hydrocarbyl, or may join together to form a ring], with a monofunctional monomer containing substituents containing Si and(or) F in the presence of a soluble dispersion-stabilizing agent. A (weight average mol.

weight

$1 \times 10^3 - 2 \times 10^4$) contains the polymer component CHa1Ca2(CO2R) [a1,a2 = H, halo, CN, hydrocarbyl; R = hydrocarbyl] $> 30\%$ and a polymer component containing > 1 polar groups selected from PO3H_2 , SO_3H , CO_2H , P(O)(OH)R (R = hydrocarbyl, oxyhydrocarbyl), and cyclic acid anhydride-containing group, 0.5-15%.

IC ICM G03G013-28

ICS G03G005-05; G03G005-06; G03G005-147

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 152640-64-7P 152681-23-7P 152681-24-8P 152681-27-1P
 152725-78-5P 156440-91-4P

RL: PREP (Preparation)

(preparation of, as latex for lithog. platemaking)

IT 152681-23-7P

RL: PREP (Preparation)

(preparation of, as latex for lithog. platemaking)

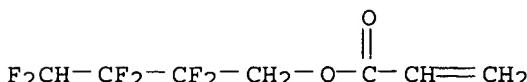
RN 152681-23-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

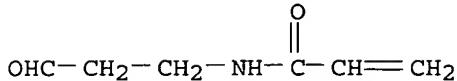
CRN 61412-55-3

CMF C7 H6 F6 O2



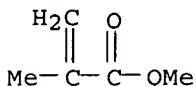
CM 2

CRN 40660-67-1
CMF C6 H9 N O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L71 ANSWER 13 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:496065 HCPLUS
 DOCUMENT NUMBER: 121:96065
 TITLE: Electrophotographic lithographic platemaking
 INVENTOR(S): Kato, Eiichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 83 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05216292	A2	19930827	JP 1992-47652	19920204
PRIORITY APPLN. INFO.:			JP 1992-47652	19920204
AB	The title lithog. platemaking is effected by producing a toner image on a lithog. blank (electrophotog. plate) and desensitizing the non-image-bearing regions with a desensitizing solution containing a hydrophilic compound having a Pearson's nucleophilic constant of ≥ 5.5 , the lithog. blank possessing ≥ 1 photoconductor layers containing a binder resin(s) (A) and a surface layer containing nonaq. system-dispersed resin particles (L). L are nonaq. solution-dispersed resin particles obtained by polymerizing ≥ 1 types of monofunctional monomers containing a formyl group(s) and(or) groups $\text{CH}(\text{OA}1)(\text{OA}2)$ [$\text{a}1, \text{a}2$ = hydrocarbyl; may combine to form a ring] with a monofunctional monomer containing Si and(or) F-containing substituents in the presence of a soluble dispersion-stabilizing resin. Resin A (weight average mol. weight $1 \times 10^3 - 2 \times 10^4$) contains the polymer component $\text{CHa}1:\text{Ca}2(\text{CO}2\text{R})$ [$\text{a}1, \text{a}2$ = H, halo, CN, hydrocarbyl; R = hydrocarbyl] $\geq 30\%$, and its polymer chain is terminated at 1 end by a polar group selected from $\text{PO}3\text{H}2$, $\text{SO}3\text{H}$, $\text{CO}2\text{H}$, $\text{P}(\text{O})(\text{OH})\text{R}$ (R = hydrocarbyl, oxycarbohydryl), and a group containing cyclic acid anhydride.			
IC	ICM G03G013-28 ICS G03G005-05; G03G005-06; G03G005-147			

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 79-41-4D, Methacrylic acid, fluoroalkyl ester, graft copolymers with methacrylates 97-90-5D, Ethyleneglycol dimethacrylate, fluorinated graft copolymers with methacrylates 106-91-2D, Glycidyl methacrylate, fluorinated graft copolymers with methacrylates 142-09-6D, Hexyl methacrylate, fluorinated graft copolymers with methacrylates 139288-11-2D, fluorinated graft copolymers with methacrylates 149234-56-0 152640-58-9 152640-60-3 152640-61-4 152640-62-5 152640-64-7 152681-23-7 152681-25-9 152681-27-1 152681-47-5, Acrolein-ethylene glycol dimethacrylate-glycidyl methacrylate-3,3,4,4,5,5-hexafluoropentyl methacrylate-hexyl methacrylate graft copolymer 152681-48-6 152725-66-1 152725-67-2 152725-68-3 152725-69-4 152725-70-7 152725-78-5, Acrolein-acrylonitrile-2,2,3,3,4,4-hexafluorobutyl acrylate-methyl methacrylate graft copolymer 156562-55-9 156562-56-0 156562-57-1 156562-58-2 156562-59-3 156562-60-6 156562-61-7 156562-62-8 156562-63-9 156562-64-0 156562-65-1 156562-66-2 156562-67-3 156562-68-4 156562-69-5 156562-70-8 156562-71-9 156562-72-0

RL: USES (Uses)

(electrophotog. plate for lithog. platemaking surface layer containing)

IT 152681-23-7

RL: USES (Uses)

(electrophotog. plate for lithog. platemaking surface layer containing)

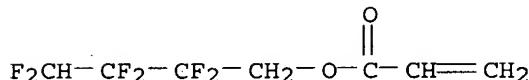
RN 152681-23-7 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 61412-55-3

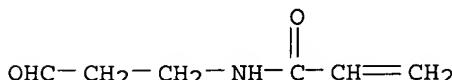
CMF C7 H6 F6 O2



CM 2

CRN 40660-67-1

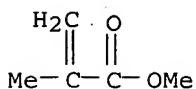
CMF C6 H9 N O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



L71 ANSWER 14 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:335000 HCPLUS

DOCUMENT NUMBER: 120:335000

TITLE: Manufacture of lithographic master

INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 63 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05066579	A2	19930319	JP 1991-254154	19910906
PRIORITY APPLN. INFO.:			JP 1991-254154	19910906

AB The title lithog. master is obtained by producing a toner image on a claimed electrophotog. plate then desensitizing the areas not bearing the toner image with a hydrophilic solution having a Pearson nucleophilic constant value of ≥ 5.5 . The electrophotog. plate utilizes ≥ 1 photoconductor layer containing photoconductive ZnO particles, a spectral sensitizer dye, ≥ 1 claimed binder resin, and nonaq. solvent-dispersed resin particles of particle size equal to or smaller than that of the above ZnO particles. The above resin (weight average mol.

weight 1

+ 103-2 + 104) contains ($\geq 30\%$) polymer component CHa1Ca2(CO2R3) [a1, a2 = H, halo, CN, hydrocarbyl; R3 = hydrocarbyl] and possesses at 1 end polar terminal groups selected from PO3H2, SO3H, CO2H, P(O)(OH)R1, etc. The above nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing a monofunctional monomer, containing a

formyl

group(s) and(or) CH(OA1)(OA2) [A1, A2 = hydrocarbyl or may join to form a ring], with a monofunctional monomer containing substituents containing F and(or)

Si in the presence of a soluble dispersion-stabilizing resin. The electrophotog. plate possesses superior electrostatic and mech. characteristics even under severe use conditions and the lithog. master obtained also gives stain-free copies over an extended run.

IC ICM G03G005-05

ICS G03G005-05; G03G005-06; G03G005-08; G03G013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 79-41-4D, fluoroalkyl ester, graft copolymer with methacrylates, uses 97-90-5D, graft copolymer with methacrylates 106-91-2D, graft copolymer with methacrylates 142-09-6D, graft copolymer with methacrylates 139288-11-2D, graft copolymer with methacrylates 149265-77-0

152640-58-9 152640-60-3 152640-61-4 152681-23-7

152681-47-5 152681-48-6 152725-66-1 152725-67-2 152725-68-3

152725-69-4 152725-70-7 152725-71-8 152725-72-9 152725-73-0

152725-74-1 152725-76-3 152725-77-4 152725-78-5 153014-29-0

155313-62-5 155313-63-6 155313-64-7 155605-47-3 155605-48-4

155605-49-5 155605-50-8 155605-51-9 155605-52-0 155605-53-1

155605-54-2 155605-55-3 155605-56-4 155605-57-5 155605-58-6

RL: USES (Uses)

(latex from, electrophotog. lithog. plate from)

IT 152681-23-7

RL: USES (Uses)

(latex from, electrophotog. lithog. plate from)

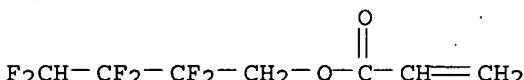
RN 152681-23-7 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2-
propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 61412-55-3

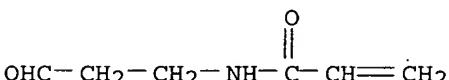
CMF C7 H6 F6 O2



CM 2

CRN 40660-67-1

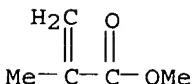
CMF C6 H9 N O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



L71 ANSWER 15 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:284869 HCPLUS

DOCUMENT NUMBER: 120:284869

TITLE: Manufacture of electrophotographic lithographic
printing plate

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04350670	A2	19921204	JP 1991-123783	19910528
PRIORITY APPLN. INFO.:			JP 1991-123783	19910528
AB	For an electrophotog. lithog. printing plate having ≥ 1 photoconductive layer made up of a photoconductive ZnO grains and a binder resin on a conductive support, the manufacture comprises: effecting imagewise exposure to form a toner image on an electrophotog. photoreceptor containing ≥ 1 kind of non-aqueous dispersion resin particles with a diameter equal to or smaller than that of a maximum grain diameter of the photoconductive ZnO grains; and desensitizing the photoreceptor by using a solution containing a hydrophilic compound having Pearson's nucleophilic constant ≥ 5.5 . Said dispersion stabilizing resin can be obtained by copolymerg. a monofunctional monomer (A) containing ≥ 1 functional group represented by formyl and/or $\text{CH}(\text{OR1})(\text{OR2})$ [R1,2 = hydrocarbon; R1 and R2 may form a cyclic organic residue] with a monofunctional monomer (B) having Si- and/or F-containing group.			
IC	ICM G03G013-26			
CC	ICS B41N003-08; G03G005-05; G03G005-06 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)			
IT	Section cross-reference(s): 35 25719-51-1DP, 2-Ethylhexyl methacrylate homopolymer, carboxy-terminated, ester with 2-hydroxyethyl methacrylate 145807-49-4P 147130-23-2P 148878-95-9P 149072-21-9DP, reaction products with allylamine 149093-90-3P 149234-63-9P 149235-47-2P 149275-08-1P 149368-81-0P 149368-84-3P 149433-97-6P 149433-98-7P 149433-99-8P 149434-02-6P 149434-09-3P 149434-10-6P 149434-11-7P 149434-17-3P 149434-38-8P 150752-98-0P 150752-99-1P 150753-06-3P 150753-07-4P 150753-08-5P 150753-09-6P 150753-38-1P 150753-39-2P 150771-43-0P 151543-37-2P 151543-40-7P 151543-44-1P 151543-46-3P			
IT	RL: PREP (Preparation) (preparation of, electrophotog. lithog. printing plate from) 150753-07-4P			
IT	RL: PREP (Preparation) (preparation of, electrophotog. lithog. printing plate from)			
RN	150753-07-4 HCPLUS			
CN	2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with hexyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, N-(3-oxopropyl)-2-propenamide and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)			

CM 1

CRN 40660-67-1

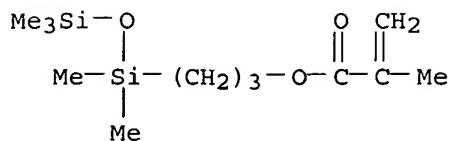
CMF C6 H9 N O2

OHC-CH₂-CH₂-NH-C(=O)-CH=CH₂

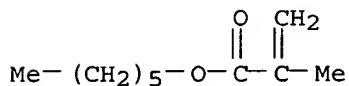
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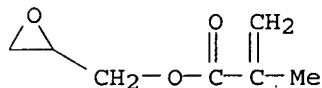
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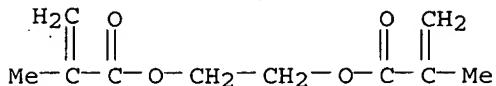
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CMF C10 H18 O2

CM 4

CRN 106-91-2
CMF C7 H10 O3

CM 5

CRN 97-90-5
CMF C10 H14 O4

L71 ANSWER 16 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:148984 HCPLUS
 DOCUMENT NUMBER: 120:148984
 TITLE: Manufacture of lithographic printing plate having
 excellent water-retaining properties
 INVENTOR(S): Kato, Eiichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05100504	A2	19930423	JP 1991-289414	19911009
PRIORITY APPLN. INFO.:			JP 1991-289414	19911009
AB	The manufacture of a lithog. printing plate, which has ≥ 1 photoconductor layer on a conductive support and an uppermost surface layer, comprises effecting imagewise exposure of the lithog. printing plate containing nonaq. dispersion resin particles in the surface layer and a binder resin in the photosensitive layer to form a toner image and desensitizing nonimage regions of the photoconductor layer with a solution containing a hydrophilic compound having a Pearson's nucleophilic constant ≥ 5.5 . The nonaq. dispersion resin particles are copolymer particles which are obtained by polymerizing in a nonaq. solvent a monofunctional monomer, which (soluble in the			
	solvent but becoming insol. upon polymerization) contains formyl and/or $\text{CH}(\text{OA1})(\text{OA2})$ [$\text{A1,2} = \text{hydrocarbyl, organic residues combining together to form a ring}$], in the presence of a dispersion stabilizing resin made up of a repeating unit containing Si- and/or F-bearing substituent and the binder resin with a weight-average mol. weight 1000-20,000 contains a repeating unit $[\text{Ca1HCa2}(\text{COOR1})]$ [$\text{a1,2} = \text{H, halo, cyano, hydrocarbyl; R1 = hydrocarbyl}$ $\geq 30\%$ and a polymer component 0.5-15% containing ≥ 1 kind of a polar moiety selected from PO3H2 , SO3H , COOH , $\text{P}(:\text{O})(\text{OH})\text{R2}$ [$\text{R2} = \text{hydrocarbyl, OR3; R3 = hydrocarbyl}$] and a group containing cyclic anhydride.			
IC	ICM G03G013-28			
	ICS G03G005-05; G03G005-06; G03G005-147			
CC	74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)			
IT	65697-21-4P 65697-22-5P 126969-78-6P 130094-33-6P 130952-79-3P 131808-63-4P 135740-18-0P 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P 135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P 135770-63-7P 135820-62-1P 139663-63-1P 142648-25-7P 145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P 145169-03-5P 145169-04-6P 145169-24-0P 145169-26-2P 145169-30-8P 145807-38-1P 145807-40-5P 145807-41-6P 145807-51-8P 145807-53-0P 145807-54-1P 145807-55-2P 145807-56-3P 145807-57-4P 145807-63-2P 145807-64-3P 145807-65-4P 145807-66-5P 145807-68-7P 145807-70-1P 145807-71-2P 145807-72-3P 145807-78-9P 145807-80-3P 146188-26-3DP, carboxy-terminated, ester with 2-hydroxyethyl methacrylate 146817-57-4P 146817-58-5P 146817-61-0P 146966-35-0P 147524-36-5P 147545-76-4P 149072-24-2DP, reaction product with 2-isocyanatoethyl methacrylate 149368-83-2P 149368-85-4P 149434-15-1P 149434-21-9P 149434-25-3P 149434-28-6P 149434-33-3P 149658-55-9P 149698-33-9P 149698-34-0P 149698-35-1P 149698-37-3P 149698-38-4P 149698-39-5P 149698-40-8P 149698-42-0P 149698-43-1P 149698-46-4P 149698-47-5P 149698-48-6P 149698-49-7P 149698-50-0P 149698-52-2P 149698-53-3P 149698-54-4P 149698-55-5P 149698-56-6P 149698-57-7P 149698-58-8P 149698-59-9P 149698-60-2P 149698-63-5P 149729-05-5P 149729-07-7P 149729-28-2P 149729-30-6P 149729-31-7P 149729-32-8P 149729-33-9P 149765-50-4P 149934-66-7P 149962-75-4P 151864-21-0P 152586-80-6P 152586-81-7DP, reaction product with acrylamide 153147-24-1P RL: TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of, for lithog. printing plate preparation)			
IT	149698-52-2P RL: TEM (Technical or engineered material use); PREP (Preparation); USES			

(Uses)

(preparation of, for lithog. printing plate preparation)

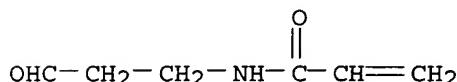
RN 149698-52-2 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl
2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1

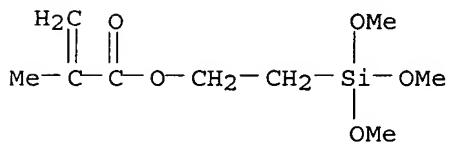
CMF C6 H9 N O2



CM 2

CRN 15289-97-1

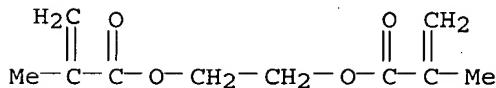
CMF C9 H18 O5 Si



CM 3

CRN 97-90-5

CMF C10 H14 O4



L71 ANSWER 17 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:148983 HCPLUS

DOCUMENT NUMBER: 120:148983

TITLE: Manufacture of electrophotographic lithographic
printing plate having excellent water retention

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 84 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

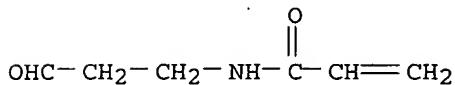
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05100503	A2	19930423	JP 1991-289413	19911009
PRIORITY APPLN. INFO.:			JP 1991-289413	19911009
AB	The manufacture of a lithog. printing plate, which has ≥ 1 photoconductor layer on a conductive support and an uppermost surface layer, comprises effecting imagewise exposure of the lithog. printing plate containing nonaq. dispersion resin particles in the surface layer and a binder resin in the photosensitive layer to form a toner image and desensitizing nonimage regions of the photoconductor layer with a solution containing a hydrophilic compound having a Pearson's nucleophilic constant ≥ 5.5 . The nonaq. dispersion resin particles are copolymer particles which are obtained by polymerizing in a nonaq. solvent a monofunctional monomer, which (soluble in the			
	solvent but becoming insol. upon polymerization) contains formyl and/or $\text{CH}(\text{OA}1)(\text{OA}2)$ [$\text{A}1,2 = \text{hydrocarbyl}$, organic residues combining together to form a ring], in the presence of a dispersion stabilizing resin made up of a repeating unit containing Si- and/or F-bearing substituent. The binder resin with a weight-average mol. weight 1000-20,000 contains a repeating unit $[\text{Ca}1\text{HCa}2(\text{COOR}1)]$ [$\text{a}1,2 = \text{H}$, halo, cyano, hydrocarbyl; $\text{R}1 = \text{hydrocarbyl}$ $\geq 30\%$ and terminated, on one end of the backbone chain, with a polar moiety selected from PO_3H_2 , SO_3H , COOH , $\text{P}(:\text{O})(\text{OH})\text{R}2$ [$\text{R}2 = \text{hydrocarbyl}$, $\text{OR}3$; $\text{R}3 = \text{hydrocarbyl}$] and a group containing cyclic anhydride.			
IC	ICM G03G013-28			
CC	74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)			
IT	128338-04-5P 128338-05-6P 138059-23-1P 138059-26-4P 138059-27-5P 138059-28-6P 138059-29-7P 138059-30-0P 138059-31-1P 138059-32-2P 138059-33-3P 138059-34-4P 138059-35-5P 138059-36-6P 139357-81-6P 139989-86-9P 139989-94-9P 142199-53-9P 145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P 145169-03-5P 145169-04-6P 145169-24-0P 145169-26-2P 145169-30-8P 145807-38-1P 145807-40-5P 145807-41-6P 145807-51-8P 145807-53-0P 145807-54-1P 145807-55-2P 145807-56-3P 145807-57-4P 145807-63-2P 145807-64-3P 145807-65-4P 145807-66-5P 145807-68-7P 145807-70-1P 145807-71-2P 145807-72-3P 145807-78-9P 145807-80-3P 146115-83-5P 146188-26-3DP, carboxy-terminated, ester with 2-hydroxyethyl methacrylate 146716-90-7P 146716-92-9P 146716-99-6P 146717-07-9P 146966-35-0P 147545-76-4P 149072-24-2DP, reaction product with isocyanatoethyl methacrylate 149295-28-3P 149368-83-2P 149368-85-4P 149434-15-1P 149434-21-9P 149434-25-3P 149434-28-6P 149434-33-3P 149658-55-9P 149698-33-9P 149698-34-0P 149698-35-1P 149698-37-3P 149698-38-4P 149698-39-5P 149698-40-8P 149698-42-0P 149698-43-1P 149698-46-4P 149698-47-5P 149698-48-6P 149698-49-7P 149698-50-0P 149698-52-2P 149698-53-3P 149698-54-4P 149698-55-5P 149698-56-6P 149698-57-7P 149698-58-8P 149698-59-9P 149698-60-2P 149698-63-5P 149729-05-5P 149729-07-7P 149729-28-2P 149729-30-6P 149729-31-7P 149729-32-8P 149729-33-9P 149765-50-4P 149934-66-7P 149962-75-4P 151864-21-0P 152586-80-6P 152586-81-7DP, reaction product with acrylamide 153147-24-1P RL: TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of, for lithog. printing plate preparation)			
IT	149698-52-2P RL: TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of, for lithog. printing plate preparation)			
RN	149698-52-2 HCPLUS			
CN	2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with			

N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl
2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

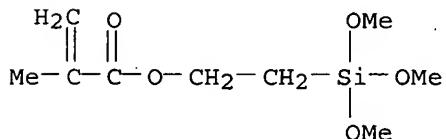
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CRN 40660-67-1
CMF C6 H9 N O2



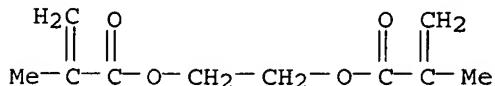
CM 2

CRN 15289-97-1
CMF C9 H18 O5 Si



CM 3

CRN 97-90-5
CMF C10 H14 O4



L71 ANSWER 18 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:148980 HCPLUS
 DOCUMENT NUMBER: 120:148980
 TITLE: Manufacture of lithographic plate from
electrophotographic photoreceptor
 INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 87 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05061214	A2	19930312	JP 1991-250310	19910904
PRIORITY APPLN. INFO.:			JP 1991-250310	19910904

AB The manufacture of a lithog. plate from an electrophotog. photoreceptor, which has ≥ 1 photosensitive layer containing at least photoconductive ZnO grains, a spectral sensitizing dye, and a binder resin on a conductive support, comprises effecting imagewise exposure of the electrophotog. photoreceptor containing the binder resin in the photosensitive layer and ≥ 1 kind of nonaq. dispersion resin grains having the average grain diameter equal to or smaller than that of the maximum grain diameter of the ZnO grains to form a toner image and effecting desensitization process of nonimage regions by using a solution containing a hydrophilic compound with Pearson's nucleophilic constant ≥ 5.5 ;. The binder resin, with weight average mol. weight 1000-20,000, has a repeating unit $[\text{CHa1Ca2COOR1}]$ [$a1,2 = \text{H, halo, cyano, hydrocarbyl}; R1 = \text{hydrocarbyl}$] as a polymer component $\geq 30\%$ and another polymer component 0.5-15% containing ≥ 1 polar moiety selected from PO3H_2 , SO_3H , COOH , and $\text{P}(:\text{O})(\text{OH})\text{R2}$ [$\text{R2} = \text{hydrocarbyl or OR3; R3 = hydrocarbyl}$] and a moiety containing a cyclic anhydride group. The nonaq. dispersion resin grains are made of a copolymer obtained through dispersion polymerization of a monofunctional monomer, which contains formyl and/or $\text{CH}(\text{OA1})(\text{OA2})$ [$\text{A1,2 = hydrocarbyl}$] and is soluble in the nonaq. solvent but becoming insol. upon polymerization, with a monofunctional monomer containing Si and/or F.

IC ICM G03G005-05

ICS G03G005-05; G03G005-06; G03G005-08; G03G013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 25719-51-1DP, 2-Ethylhexyl methacrylate homopolymer, carboxy-terminated, ester with 2-hydroxyethyl methacrylate 52229-66-0P 65697-21-4P
 65697-22-5P 126969-78-6P 130094-33-6P 130952-79-3P 131808-63-4P
 135740-18-0P 135740-30-6P 135740-31-7P 135740-32-8P 135740-33-9P
 135740-35-1P 135740-36-2P 135740-37-3P 135740-38-4P 135740-39-5P
 135740-41-9P 135740-43-1P 135740-44-2P 135740-46-4P 135770-63-7P
 135820-62-1P 139645-92-4P 139663-63-1P 142648-25-7P 145807-49-4P
 146817-57-4P 146817-58-5P 146817-61-0P 147130-23-2P 147524-36-5P
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 149434-02-6P 149434-04-8P 149434-06-0P 149434-09-3P 149434-10-6P
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 152681-47-5P 152681-48-6P 152725-66-1P 152725-67-2P 152725-68-3P
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 152725-74-1P 152725-75-2P 152725-76-3P 152725-77-4P 152725-78-5P
 153014-29-0P

RL: PREP (Preparation)

(preparation of, for electrophotog. photoreceptor for lithog. plate preparation)

IT 152681-23-7P

RL: PREP (Preparation)

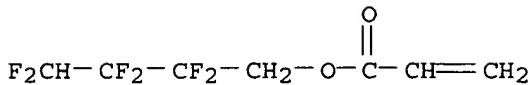
(preparation of, for electrophotog. photoreceptor for lithog. plate preparation)

RN 152681-23-7 HCPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2,2,3,3,4,4-hexafluorobutyl 2-propenoate and N-(3-oxopropyl)-2-propenamide, graft (9CI) (CA INDEX NAME)

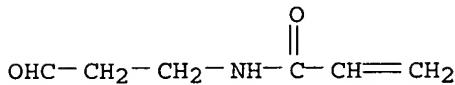
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CRN 61412-55-3
CMF C7 H6 F6 O2



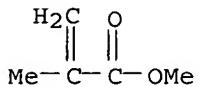
CM 2

CRN 40660-67-1
CMF C6 H9 N O2



CM 3

CRN 80-62-6
CMF C5 H8 O2



L71 ANSWER 19 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:41999 HCPLUS
 DOCUMENT NUMBER: 120:41999
 TITLE: Electrophotographic lithographic printing plate giving
 high sensitivity to semiconductor laser scanning
 method
 INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 84 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05034949	A2	19930212	JP 1991-213049	19910731
PRIORITY APPLN. INFO.:			JP 1991-213049	19910731
AB	In an electrophotog. lithog. plate having ≥ 1 photoconductor layer containing photoconductive ZnO grains, a spectral sensitizing dye and a binder resin with the photoconductor layer containing ≥ 1 following binder resin (A) and ≥ 1 kind of nonaq. dispersion resin particles (L) whose average grain diameter is smaller than or equal to the maximum grain diameter of			

the photoconductive ZnO particles, a toner image is formed on the photoreceptor by imagewise exposure following elec. charging, and nonimage regions of the photoconductor layer are desensitized with a hydrophilic compound-containing solution having Pearson's nucleophilic constant ≥ 5.5 . The binder resin (A) (weight average mol. weight 1,000-20,000) contains a repeating

unit $[a1HC-Ca2(COOR3)]$ [$a1,2 = H$, halo, cyano, hydrocarbon; $R3 =$ hydrocarbon] as a polymer component $\geq 30\%$ and further contains a polymer component 0.5-15% having ≥ 1 polar moiety selected from $PO3H2$, $SO3H$, $COOH$, $P(:O)(OH)R1$ [$R1 =$ hydrocarbon, $OR2$; $R2 =$ hydrocarbon], and group containing cyclic anhydride. The nonaq. dispersion resin particles (L) are made of a copolymer obtained by dispersion polymerization of a monofunctional monomer (C) in the presence of a dispersion stabilizing resin, which, soluble in a nonaq. solvent, contains a repeating unit containing a moiety having Si and/or F, in which the monofunctional monomer (C), which, soluble in the nonaq. solvent but insol. upon polymerization, contains ≥ 1 functional group from formyl and/or $HC(OA1)(OA2)$ [$A1,2 =$ hydrocarbon; or may form a cyclic residue by combining together].

IC ICM G03G005-05

ICS G03G005-05; G03G005-06; G03G005-08; G03G013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 65697-21-4P 65697-22-5P 126969-70-8P 126969-78-6P 130094-33-6P
 130952-79-3P 131808-63-4P 135740-18-0P 135740-30-6P 135740-31-7P
 135740-32-8P 135740-33-9P 135740-35-1P 135740-36-2P 135740-37-3P
 135740-38-4P 135740-39-5P 135740-41-9P 135740-43-1P 135740-44-2P
 135740-46-4P 135770-63-7P 135820-62-1P 139663-63-1P 142648-25-7P
 145168-75-8P 145168-89-4P 145168-94-1P 145169-02-4P 145169-03-5P
 145169-04-6P 145169-24-0P 145169-30-8P 145807-38-1P 145807-40-5P
 145807-51-8P 145807-53-0P 145807-54-1P 145807-55-2P 145807-56-3P
 145807-62-1P 145807-63-2P 145807-64-3P 145807-65-4P 145807-66-5P
 145807-68-7P 145807-70-1P 145807-71-2P 145807-72-3P 145807-78-9P
 145807-80-3P 146188-26-3DP, carboxy-terminated, ester with
 2-hydroxyethyl methacrylate 146817-57-4P 146817-58-5P 147524-36-5P
 149072-24-2DP, reaction product with 2-isocyanatoethyl methacrylate
 149368-83-2P 149368-85-4P 149434-15-1P 149434-25-3P 149434-28-6P
 149434-33-3P 149658-55-9P 149698-39-5P 149698-40-8P 149698-42-0P
 149698-43-1P 149698-46-4P 149698-47-5P 149698-48-6P 149698-49-7P
 149698-50-0P 149698-51-1P 149698-52-2P 149698-54-4P
 149698-55-5P 149698-56-6P 149698-57-7P 149698-58-8P 149698-59-9P
 149698-60-2P 149729-05-5P 149729-06-6P 149729-30-6P 149729-31-7P
 149729-32-8P 149729-33-9P 149765-50-4P 149934-66-7P 150103-52-9P
 150497-92-0P 151688-53-8P 151688-55-0P 151709-96-5P 151709-97-6P
 151754-98-2P 151754-99-3P 151755-00-9P 151755-01-0P 151755-02-1P
 151755-03-2P 151755-05-4P 151755-06-5P 151755-07-6P 151864-21-0P
 152103-17-8P

RL: PREP (Preparation)

(preparation of, electrophotog. lithog. printing plate from)

IT 149698-52-2P

RL: PREP (Preparation)

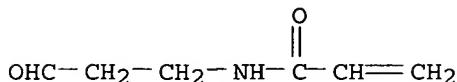
(preparation of, electrophotog. lithog. printing plate from)

RN 149698-52-2 HCPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl
 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

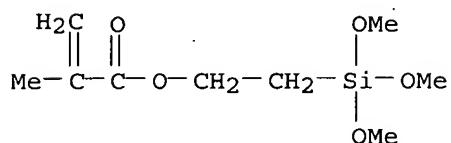
CM 1

CRN 40660-67-1
 CMF C6 H9 N O2



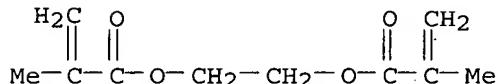
CM 2

CRN 15289-97-1
 CMF C9 H18 O5 Si



CM 3

CRN 97-90-5
 CMF C10 H14 O4



L71 ANSWER 20 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:19184 HCPLUS
 DOCUMENT NUMBER: 120:19184
 TITLE: Manufacture of electrophotographic plate for
 lithographic platemaking
 INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 50 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05002281	A2	19930108	JP 1991-154724	19910626
PRIORITY APPLN. INFO.:			JP 1991-154724	19910626
AB	The manufacture comprises forming a toner image on an electrophotog. plate described below by imagewise exposing, treating the photoconductive layer at the nonimage regions with a lipophobic desensitizing solution containing a hydrophilic compound of Pearson's nucleophilic constant ≥ 5.5 . In the above electrophotog. plate obtained by coating an elec. conductive support			

with ≥ 1 photoconductive layers containing photoconductive ZnO and a binder resin, and a surface layer, the surface layer contains nonaq. solvent-dispersed resin particles of particle size equal to or smaller than that of the largest ZnO particles. The nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing a monofunctional monomer (A containing formyl and/or a functional group $\text{CH}(\text{OA}_1)(\text{OA}_2)$ [$\text{R}_1, 2 =$ hydrocarbon group; R_1 and R_2 may form a ring], with a monofunctional monomer (B) containing Si and/or F-containing substituents in the presence of a soluble dispersion-stabilizing resin containing Si and/or F-containing substituents.

IC ICM G03G005-147
ICS G03G013-28

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

IT 150752-98-0P 150752-99-1P 150753-00-7P 150753-06-3P
150753-07-4P 150753-08-5P 150753-09-6P 150753-11-0P
150753-12-1P 150753-13-2P 150753-14-3P 150753-15-4P 150753-16-5P
150753-17-6P 150753-18-7P 150753-19-8P 150753-20-1P 150753-21-2P
150753-33-6P 150753-38-1P 150753-39-2P 150753-41-6P 150753-42-7P
150753-43-8P 150753-45-0P 150771-43-0P 151565-03-6P 151565-04-7P
151565-05-8P 151565-06-9P 151565-07-0P 151565-08-1P 151575-39-2P
151677-25-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, latex, electrophotog. lithog. plate from)

IT 150753-07-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, latex, electrophotog. lithog. plate from)

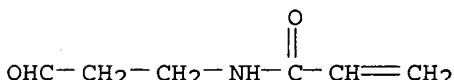
RN 150753-07-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with hexyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, N-(3-oxopropyl)-2-propenamide and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1

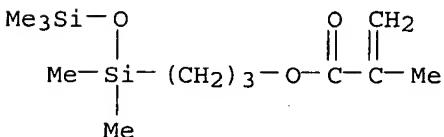
CMF C6 H9 N O2



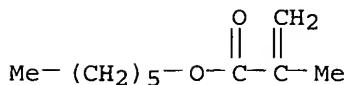
CM 2

CRN 18151-85-4

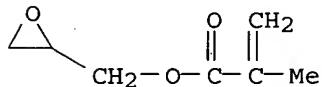
CMF C12 H26 O3 Si2



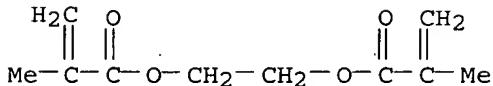
CM 3

CRN 142-09-6
CMF C10 H18 O2

CM 4

CRN 106-91-2
CMF C7 H10 O3

CM 5

CRN 97-90-5
CMF C10 H14 O4

L71 ANSWER 21 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:637925 HCPLUS

DOCUMENT NUMBER: 119:237925

TITLE: Manufacture of electrophotographic master plate for
lithographic platemaking

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 05002275	A2	19930108	JP 1991-154725	19910626
PRIORITY APPLN. INFO.:	JP 1991-154725 19910626			
AB The manufacture comprises forming a toner image on an electrophotog. plate described below by imagewise exposing, treating the photoconductive layer at the nonimage regions with a lipophobic desensitizing solution containing a hydrophilic compound of Pearson's nucleophilic constant ≥ 5.5 . In the				

above electrophotog. plate having an image-receiving layer on its elec. conductive support, the image-receiving layer contains nonaq. solvent-dispersed resin particles of particle size equal to or smaller than that of the largest ZnO particles. The nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing a monofunctional monomer (A containing formyl and/or a functional group $\text{CH}(\text{OA1})(\text{OA2})$ [$\text{R1,2} =$ hydrocarbon group; R1 and R2 may form a ring], with a monofunctional monomer (B) containing Si and/or F-containing substituents in the presence of a soluble dispersion-stabilizing resin containing Si and/or F-containing substituents.

IC ICM G03G005-05

ICS B41N001-14; G03G005-06; G03G013-28

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

IT 150752-98-0P 150752-99-1P 150753-00-7P 150753-06-3P

150753-07-4P 150753-08-5P 150753-09-6P 150753-11-0P

150753-12-1P 150753-13-2P 150753-14-3P 150753-15-4P 150753-16-5P

150753-17-6P 150753-18-7P 150753-19-8P 150753-20-1P 150753-21-2P

150753-33-6P 150753-38-1P 150753-39-2P 150753-40-5P 150753-41-6P

150753-42-7P 150753-43-8P 150753-44-9P 150753-45-0P 150771-43-0P

150771-47-4P 150771-48-5P 150771-49-6P 150771-50-9P 150771-51-0P

150771-52-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, latex, electrophotog. lithog. plate from)

IT 150753-07-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, latex, electrophotog. lithog. plate from)

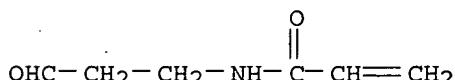
RN 150753-07-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with hexyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, N-(3-oxopropyl)-2-propenamide and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1

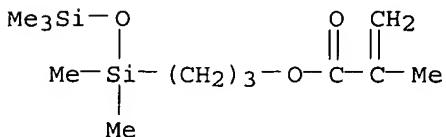
CMF C6 H9 N O2



CM 2

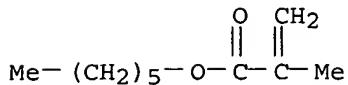
CRN 18151-85-4

CMF C12 H26 O3 Si2



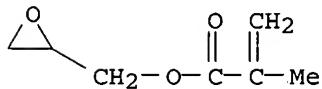
CM 3

CRN 142-09-6
 CMF C10 H18 O2



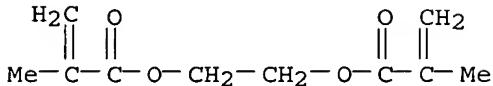
CM 4

CRN 106-91-2
 CMF C7 H10 O3



CM 5

CRN 97-90-5
 CMF C10 H14 O4



L71 ANSWER 22 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:570524 HCPLUS

DOCUMENT NUMBER: 119:170524

TITLE: Manufacture of lithographic master via
electrophotography

INVENTOR(S): Kato, Eiichi; Kasai, Kyosuke

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 71 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

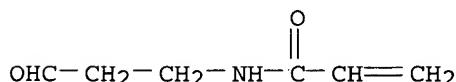
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04333054	A2	19921120	JP 1991-131622	19910508
PRIORITY APPLN. INFO.:			JP 1991-131622	19910508
AB The manufacture comprises forming a toner image on an electrophotog. plate described below by imagewise exposing, treating the photoconductive layer at the nonimage regions with a lipophobic desensitizing solution containing a hydrophilic compound having Pearson's nucleophilic constant ≥ 5.5 . In				

the above electrophotog. plate obtained by coating at least an elec. conductive support with ≥ 1 photoconductive layers containing photoconductive ZnO particles, spectral sensitizing dyes and a binder resin, the photoconductive layer contains a binder resin (A) and nonaq. solvent-dispersed resin particles (L) of average particle size equal to or smaller than that of the largest ZnO particles. The above resin (A) (average mol. weight 1×10^3 - 2×10^4) contains polymer component $\text{CHa}_1\text{Ca}_2\text{CO}_2\text{R}$ ($\text{a}_1,2 = \text{H}$, halo, CN, hydrocarbon group; R = hydrocarbon group) $\geq 30\%$, and ≥ 1 polar groups selected from PO_3H_2 , SO_3H , CO_2H , $\text{P}(\text{O})(\text{OH})\text{R}_1$ [$\text{R}_1 =$ hydrocarbon group, OR_2 ($\text{R}_2 =$ hydrocarbon group)] and cyclic acid anhydride-containing group, are bonded to 1 end of the polymer main chain. The nonaq. solvent-dispersed resin particles are obtained by dispersion polymerizing a monofunctional monomer (C) containing formyl and/or a functional group $\text{CH}(\text{OA}_1)(\text{OA}_2)$ [$\text{A}_1,2 =$ hydrocarbon group; A1 and A2 may form a ring], in the presence of a soluble dispersion-stabilizing resin containing structure-repeating units containing Si and/or F-containing substituents.

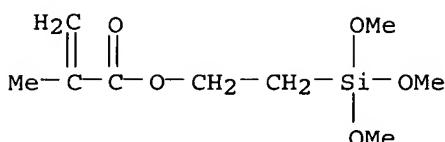
IC ICM G03G005-06
 ICS G03G005-05; G03G005-08; G03G013-28
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 IT 146966-35-0P 149698-33-9P 149698-34-0P 149698-35-1P 149698-36-2P
 149698-37-3P 149698-38-4P 149698-39-5P 149698-40-8P 149698-42-0P
 149698-43-1P 149698-46-4P 149698-47-5P 149698-48-6P 149698-49-7P
 149698-50-0P 149698-51-1P 149698-52-2P 149698-53-3P
 149698-54-4P 149698-55-5P 149698-56-6P 149698-57-7P 149698-58-8P
 149698-59-9P 149698-60-2P 149698-62-4P 149698-63-5P 149729-05-5P
 149729-06-6P 149729-07-7P 149729-28-2P 149729-30-6P 149729-31-7P
 149729-32-8P 149729-33-9P 149765-50-4P 149934-66-7P 149962-75-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and use of, latex, electrophotog. plate from)
 IT 149698-52-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and use of, latex, electrophotog. plate from)
 RN 149698-52-2 HCPLUS
 CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with N-(3-oxopropyl)-2-propenamide and 2-(trimethoxysilyl)ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1
 CRN 40660-67-1
 CMF C6 H9 N O2



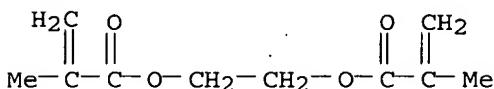
CM 2

CRN 15289-97-1
 CMF C9 H18 O5 Si



CM 3

CRN 97-90-5
CMF C10 H14 04



L71 ANSWER 23 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:503120 HCPLUS
DOCUMENT NUMBER: 119:103120
TITLE: Properties controlling the diffusion and release of water-soluble solutes from poly(ethylene oxide) hydrogels. 1. Polymer composition
AUTHOR(S): McNeill, Marion E.; Graham, Neil B.
CORPORATE SOURCE: Dep. Pure Appl. Chem., Univ. Strathclyde, Glasgow, G1 1XL, UK
SOURCE: Journal of Biomaterials Science, Polymer Edition (1993), 4(3), 305-22
CODEN: JBSEEA; ISSN: 0920-5063
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This study examines the state of water-association with poly(ethylene oxide), as evidenced by diffusivity, in a series of crosslinked polyurethanes made from poly(ethylene glycols) of a range of mol. wts. As a subsidiary underpinning exercise the correlation of diffusivity with water content at relatively high levels of swelling (>45%) using a variety of semi-empirical equations was analyzed. Three water-soluble compds. with similar mol. wts. and which exhibit minimal interaction with the polymer, as shown by their partition coeffs., were chosen for this part of the research program. These were proxyphylline, morphine-HCl and caffeine. The best statistical correlations of the data were obtained for plots of: (a) diffusivity against weight percent water; and (b) log diffusivity against the reciprocal of the weight percent of water in the hydrogels. Proxyphylline results for the high levels of swelling compns. were augmented with data from lower swelling compns. and a clear break in the slope of diffusivity against percentage of water in the swollen hydrogel was obtained. This indicated a change in the nature of the diffusion at this point. The probability of this transition point corresponding to a change for diffusion through water bound as trihydrate to diffusion in free water is discussed.
CC 63-5 (Pharmaceuticals)
IT Section cross-reference(s): 36
IT 85699-32-7 149295-85-2
IT RL: BIOL (Biological study)
(crosslinked, hydrogels, water-soluble drugs diffusion and release from, polymer composition control of)

IT 149295-85-2

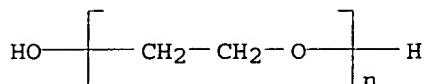
RL: BIOL (Biological study)
 (crosslinked, hydrogels, water-soluble drugs diffusion and release from,
 polymer composition control of)

RN 149295-85-2 HCPLUS

CN 1,2,6-Hexanetriol, polymer with α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

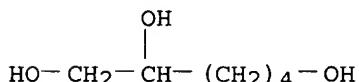
CM 1

CRN 25322-68-3
 CMF (C₂ H₄ O)_n H₂ O
 CCI PMS



CM 2

CRN 106-69-4
 CMF C₆ H₁₄ O₃



L71 ANSWER 24 OF 27 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:125277 HCPLUS
 DOCUMENT NUMBER: 110:125277
 TITLE: Silver halide photographic materials with polyester
 substrates having improved layer adhesion
 INVENTOR(S): Tachibana, Noriki; Nakagawa, Satoshi
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63218951	A2	19880912	JP 1987-52302	19870306
PRIORITY APPLN. INFO.: JP 1987-52302 19870306				
AB A polyester film base of a photog. material is undercoated with polymers reactive with gelatin. Thus, a corona-discharged PET film was coated with a composition containing 4.0 g copolymer obtained by polymerization of Bu acrylate 30, CH ₂ :CHCHNHCH ₂ NHCO(CH ₂) ₂ SO ₂ CH ₂ CH ₂ Cl 40, and hydroxyethyl acrylate 30 parts followed by treatment with Et ₃ N, 20 mg each of 2 kinds of surfactants, 30 mg hexamethylenebis ethyleneurea, and 2.0 g gelatin, dried, and then coated with a solution containing 1 g gelatin and 20 mg saponin. A				

photosensitive printing plate was obtained by coating a Ag halide emulsion layer and a protective layer on these undercoat layers, and normally processed. A test of adhesion strength by lifting a squarely cut surface of the film with adhesive tape showed the effectiveness of the invention undercoat.

IC ICM G03C001-80

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 85899-15-6P 119485-23-3P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of, undercoatings for polyester photog.

film bases

from)

IT 119485-23-3P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and polymerization of, undercoatings for polyester photog.

film bases

from)

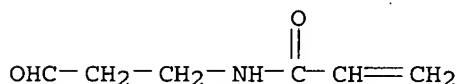
RN 119485-23-3 HCPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-hydroxyethyl 2-propenoate and N-(3-oxopropyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1

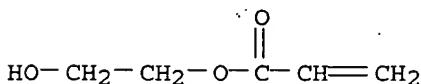
CMF C6 H9 N O2



CM 2

CRN 818-61-1

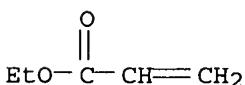
CMF C5 H8 O3



CM 3

CRN 140-88-5

CMF C5 H8 O2

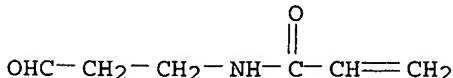


L71 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1988:464175 HCAPLUS
 DOCUMENT NUMBER: 109:64175
 TITLE: Silver halide color photographic material containing hardened top organopolysiloxane layer
 INVENTOR(S): Tachibana, Noriki; Ueda, Eiichi; Kagawa, Nobuaki; Ota, Hideo; Oi, Ichiro
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62269139	A2	19871121	JP 1986-113287	19860516
JP 06019519	B4	19940316		

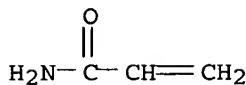
PRIORITY APPLN. INFO.: JP 1986-113287 19860516
 AB A Ag halide color photog. material contains a hydrophilic colloid top layer containing an organopolysiloxane and hardened with an amine hardener. Even if the hydrophilic colloid layer contains a large amount of the organopolysiloxane, the transfer of the organopolysiloxane does not occur during the manufacture of the photog. material. Also, the properties of the photog. material are not affected by the addition of the organopolysiloxane.
 IC ICM G03C001-76
 ICS G03C001-30
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 IT 81869-03-6 85899-16-7 95528-55-5 95528-57-7 115401-85-9
 RL: USES (Uses)
 (hardener, for silver halide color photog. material)
 IT 115401-85-9
 RL: USES (Uses)
 (hardener, for silver halide color photog. material)
 RN 115401-85-9 HCAPLUS
 CN 2-Propenamide, N-(3-oxopropyl)-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 40660-67-1
CMF C6 H9 N O2

CM 2

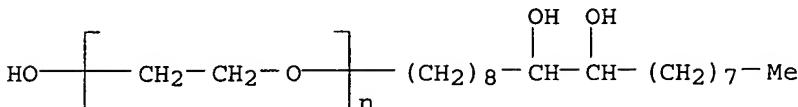
CRN 79-06-1
CMF C3 H5 N O



L71 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1985:562185 HCAPLUS
 DOCUMENT NUMBER: 103:162185
 TITLE: Brominated, chlorinated and hydroxylated surfactants derived from oleyl chain: preparation and surface properties
 AUTHOR(S): Garti, N.; Aserin, A.
 CORPORATE SOURCE: Sch. Appl. Sci. Technol., Hebrew Univ. Jerusalem, Jerusalem, 91904, Israel
 SOURCE: Journal of Dispersion Science and Technology (1985), 6 (2), 175-91
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Bromination, chlorination and hydroxylation of the double bond in polyethylene glycol oleates and oleyl ethers and polyglycerol oleates were carried out. The products had higher sp. gr. and therefore can be used as weighting agents. Surface properties and the ability to emulsify water and oils did not change significantly. Phys. (sp. gr., viscosity, and refractive index) and surface properties (such as reduction of surface tension of water, critical micelle concentration (CMC), area per mol. at the liquid/air interface, efficiency and effectiveness were measured and compared to the corresponding unsatd. surfactants. The incorporated dibromo, dichloro, or dihydroxy groups diminish some of the surface properties of the surfactant, e.g. higher surface tension, higher CMC value, higher area per mol., and lower efficiency and effectiveness in comparison to the related unsatd. surfactants. This study confirmed early findings suggesting that oleyl ethoxylated surfactants behaved abnormally when compared to straight chain ethoxylated alcs. or acids or polyglycerol esters and that any derivatization in the hydrophobic chain would significantly alter surface properties.

CC 46-3 (Surface Active Agents and Detergents)
 IT 9007-48-1DP, brominated 33940-98-6DP, brominated 90168-40-4P
 98815-20-4P 98815-21-5P 98827-72-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and surface-active properties of)
 IT 98815-21-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and surface-active properties of)
 RN 98815-21-5 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(9,10-dihydroxyoctadecyl)- ω -hydroxy- (9CI) (CA INDEX NAME)



L71 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1978:548055 HCAPLUS

DOCUMENT NUMBER: 89:148055
 TITLE: Modification of proteins
 INVENTOR(S): Ogata, Nobuo; Ogawa, Hideaki; Watanabe, Kiyoshi
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan
 SOURCE: Jpn. Tokkyo Koho, 5 pp.
 CODEN: JAXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53024227	B4	19780719	JP 1974-85210	19740726
PRIORITY APPLN. INFO.:			JP 1974-85210	A 19740726
AB	Proteins (10-40%) reacted with 60-90% NCO-terminated aliphatic polyurethanes to prepare fibrous materials. Thus, 4.75 g 1,4-butanediol was dissolved in 50 mL C6H5Cl at 90°, mixed with 80% of a solution of 10.39 g hexamethylene diisocyanate (I) in 20 mL C6H5Cl, heated at reflux for 10 min, mixed with the remaining I solution, and heated at reflux for 1.5 h to prepare a polymer solution, which was mixed (50 mL) with 75 mL Me2SO containing 2.83 g yeast protein and heated at 100° for 3.75 h to prepare 100% white fibrous material.			
IC	C08H001-00			
CC	39-2 (Textiles)			
IT	25035-42-1D, reaction product with yeast proteins 25748-74-7D, reaction product with yeast proteins			
RL:	USES (Uses) (fibrous)			
IT	25035-42-1D, reaction product with yeast proteins			
RL:	USES (Uses) (fibrous)			
RN	25035-42-1 HCPLUS			
CN	Poly(oxy-1,4-butanediylloxycarbonylimino-1,6-hexanediyliminocarbonyl) (9CI) (CA INDEX NAME)			

